## **Abstract**

The present invention relates to *in vitro* cultured skin substitutes, and in particular to improved methods for organotypic culture of skin substitutes. In some embodiments, the dermal equivalent of the skin substitute is lifted to air interface of the culture prior to seeding with keratinocytes. In other embodiments, increased concentrations of collagen are used to form the dermal equivalent. In still other embodiments, optimized media are utilized to maintain the skin equivalents.

5